

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Can you use the setBorder method to set a border for _____? (choose all that apply) 1) _____

- A) Component
- B) JLabel
- C) JButton
- D) Container
- E) JComponent

2) Analyze the following code: 2) _____

```
import javax.swing.*;

public class Test extends JFrame {
    private JButton jbtOK = new JButton("OK");

    public static void main(String[] args) {
        // Create a frame and set its properties
        JFrame frame = new Test();
        frame.setTitle("Logic Error");
        frame.setSize(200, 100);
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setVisible(true);
    }

    public Test() {
        jbtOK.setToolTipText("This is a button");
        add(new JButton("OK"));
    }
}
```

- A) The tool tip text is displayed when you move the mouse on the button.
- B) The tool tip text will be displayed if you replace add(new JButton("OK")) with add(jbtOK).
- C) The tool tip text will be displayed if you replace add(new JButton("OK")) with add(jbtOK = new JButton("OK")).
- D) The tool tip text will be displayed if you swap the two lines in the Test constructor.

3) Which of the following statements are true? (choose all that apply) 3) _____

- A) You can set a background color on any instance of Component.
- B) You can set a border on any instance of JComponent.
- C) You can set a foreground color on any instance of Component.
- D) You can set a tooltip text on any instance of JComponent.

- 4) You can remove a component from a container by using the remove() method. (This question is not covered in the text) 4) _____
 A) true B) false
- 5) To add a component c to a JPanel p, use _____. 5) _____
 A) p.getContentPane(c) B) p.insert(c)
 C) p.append(c) D) p.add(c)
- 6) What is best to describe the relationship between Component and Font? 6) _____
 A) Aggregation B) Inheritance C) Association D) Composition
- 7) Which of the following classes is a heavyweight component? 7) _____
 A) JButton B) JPanel C) JFrame D) JTextField
- 8) The order of the components added into a container of FlowLayout is immaterial. 8) _____
 A) true B) false
- 9) Which of the following are subclasses of java.awt.Component? (choose all that apply) 9) _____
 A) Container classes B) Layout managers
 C) Helper classes such as Color and Font D) Swing user interface classes
- 10) A frame can be placed inside a frame. 10) _____
 A) true B) false
- 11) The method _____ sets the font (Helvetica, 20-point bold) in component C. 11) _____
 A) c.setFont(new Font("helvetica", BOLD, 20))
 B) c.setFont(new Font("Helvetica", Font.bold, 20))
 C) c.setFont(Font("Helvetica", Font.BOLD, 20))
 D) c.setFont(new Font("Helvetica", Font.BOLD, 20))
- 12) The method _____ sets the background color to yellow in JFrame f. 12) _____
 A) setBackground(Color.YELLOW)
 B) setBackground(Color.yellow)
 C) f.setBackground(Color.YELLOW)
 D) f.setBackground(Color.yellow)
 E) f.setBackGround(Color.yellow)
- 13) The method _____ sets the foreground color to yellow in JFrame f. (choose all that apply) 13) _____
 A) f.setForeground(Color.yellow)
 B) f.setForeGround(Color.yellow)
 C) setForeground(Color.YELLOW)
 D) f.setForeground(Color.YELLOW)
 E) setForeground(Color.yellow)
- 14) The frame title bar is inside the frame, so you cannot draw things in the area of the title bar. 14) _____
 A) true B) false

- 15) You should never directly call the `paintComponent()` method. 15) _____
A) true B) false
- 16) The header for the `paintComponent` method is _____. 16) _____
A) `private void paintComponent(Graphics g)`
B) `protected void paintComponent(Graphics g)`
C) `public void paintComponent(Graphics g)`
D) `protected void paintComponent()`
- 17) The coordinate of the upper-left corner of a frame is _____. 17) _____
A) (10, 10) B) (100, 100) C) (25, 25) D) (0, 0)
- 18) The _____ point of a component has coordinate (0, 0). 18) _____
A) up-left corner B) bottom-right corner
C) bottom-left corner D) up-right corner
- 19) Invoking _____ returns the width of the string in a `FontMetrics` object `fm`. 19) _____
A) `fm.stringWidth(s)` B) `fm.getHeight(s)`
C) `fm.getWidth(s)` D) `getLength(s)`
- 20) The `repaint()` method has a parameter of `Graphics` type. 20) _____
A) true B) false
- 21) You can draw things on an applet. 21) _____
A) true B) false
- 22) You can draw graphics on any GUI components. 22) _____
A) true B) false
- 23) You can draw things on a panel. 23) _____
A) true B) false

24) Analyze the following code.

24) _____

```
import java.awt.*;
import javax.swing.*;

public class Test {
    public static void main(String[] args) {
        JFrame frame = new JFrame("My Frame");
        frame.add(new MyDrawing("Welcome to Java!"));
        frame.setSize(300, 300);
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setVisible(true);
        frame.setVisible(true);
    }
}

class MyDrawing extends JPanel {
    String message;

    public MyDrawing(String message) {
        this.message = message;
    }

    public void paintComponent(Graphics g) {
        super.paintComponent(g);

        g.drawString(message, 20, 20);
    }
}
```

- A) It is a runtime to invoke the setVisible(true) twice.
- B) The program has a runtime error because the paintcomponent should be spelled as paintComponent.
- C) The program runs fine and displays Welcome to Java!
- D) The program has a syntax error because the paintcomponent should be spelled as paintComponent.
- E) The program runs, but it does not display the message.

25) Which of the following statements are correct? (choose all that apply)

25) _____

- A) You can set an image on a button, but the image is not resizable.
- B) You can set an image on a label, but the image is not resizable.
- C) You can draw an image on a GUI component using the drawImage method in the Graphics object. This image is resizable.

26) Given a Graphics object g, to draw an circle with radius 20 centered at (50, 50), you use

26) _____

- A) g.drawOval(50, 50, 20, 20)
- B) g.drawOval(50, 50, 40, 40)
- C) g.drawOval(30, 30, 40, 40)
- D) g.drawOval(30, 30, 20, 20)

- 27) The method in the `ActionEvent` _____ returns the action command of the button. 27) _____
A) `getID()` B) `paramString()`
C) `getModifiers()` D) `getActionCommand()`
- 28) Which of the following statements are true? (choose all that apply) 28) _____
A) All the event classes are subclasses of `EventObject`.
B) If a component can generate an event, any subclass of the component can generate the same type of event.
C) Every GUI component can generate `MouseEvent`, `KeyEvent`, `FocusEvent`, and `ComponentEvent`.
D) A component on which an event is generated is called the source object.
- 29) The listener's _____ method is invoked after a mouse button is released. (choose all that apply) 29) _____
A) `public void mouseExited(MouseEvent e)`
B) `public void mousePressed(MouseEvent e)`
C) `public void mouseEntered(MouseEvent e)`
D) `public void mouseClicked(MouseEvent e)`
E) `public void mouseReleased(MouseEvent e)`
- 30) Which of the following statements are true? (choose all that apply) 30) _____
A) You can use the `addActionListener` method in the `Timer` class to add a listener.
B) You can add a listener in the `Timer` constructor.
C) You can specify a delay using the `setDelay` method;.
D) You can specify a delay in the `Timer` constructor.
- 31) The interface _____ should be implemented to listen for a button action event. 31) _____
A) `ActionListener`
B) `MouseListener`
C) `WindowListener`
D) `ContainerListener`
E) `FocusListener`
- 32) A source object can register only one listener. 32) _____
A) true B) false
- 33) To check whether a `DELETE` key is pressed or released, which handler should be used? 33) _____
(choose all that apply)
A) `keyReleased(KeyEvent e)`
B) `keyTyped(KeyEvent e)`
C) `keyPressed(KeyEvent e)`
- 34) To listen to mouse moved events, the listener must implement the _____ interface or extend the _____ class. 34) _____
A) `MouseListener/MouseAdapter`
B) `WindowListener/WindowAdapter`
C) `ComponentListener/ComponentAdapter`
D) `MouseMotionListener/MouseMotionAdapter`

- 35) Which of the following statements are true? (choose all that apply) 35) _____
- A) You can add multiple listeners for a Timer object.
 - B) You must always specify a listener when creating a Timer object.
 - C) To start a timer, invoke timer.start().
 - D) When a timer is created, it is automatically started.
 - E) To stop a timer, invoke timer.stop().
- 36) Which of the following statements are true? (choose all that apply) 36) _____
- A) An anonymous inner class is an inner class without a name.
 - B) An anonymous inner class is compiled into a class named OuterClassName\$.class.
 - C) An anonymous inner class must always extend a superclass or implement an interface, but it cannot have an explicit extends or implements clause.
 - D) An anonymous inner class must implement all the abstract methods in the superclass or in the interface.
 - E) An anonymous inner class always uses the no-arg constructor from its superclass to create an instance. If an anonymous inner class implements an interface, the constructor is Object().
- 37) _____ is a component that enables the user to choose a single value or multiple values. 37) _____
- A) A list
 - B) A combo box
 - C) A text field
 - D) A label
- 38) You can see several frames at one time. 38) _____
- A) true
 - B) false
- 39) The following are properties of a JSlider. (choose all that apply) 39) _____
- A) visibleAmount
 - B) maximum
 - C) minimum
 - D) orientation
- 40) The method _____ specifies that the text and icon are horizontally aligned to the right in the label jlbl. 40) _____
- A) jlbl.setHorizontalAlignment(JButton.RIGHT)
 - B) jlbl.setVerticalTextPosition(JButton.LEFT)
 - C) jlbl.setHorizontalTextPosition(JButton.RIGHT)
 - D) jlbl.setHorizontalAlignment(JButton.LEFT)
 - E) jlbl.setHorizontalTextPosition(JButton.LEFT)
- 41) The following are properties of a JScrollBar. (choose all that apply) 41) _____
- A) maximum
 - B) visibleAmount
 - C) orientation
 - D) minimum
- 42) _____ may generate ActionEvent. (choose all that apply) 42) _____
- A) JTextArea
 - B) JTextField
 - C) JComboBox
 - D) JList
- 43) The method _____ specifies that the text is placed on the right of the icon in the button jbt. 43) _____
- A) jbt.setHorizontalTextPosition(JButton.RIGHT)
 - B) jbt.setHorizontalTextPosition(JButton.LEFT)
 - C) jbt.setHorizontalAlignment(JButton.RIGHT)
 - D) jbt.setHorizontalAlignment(JButton.LEFT)
 - E) jbt.setVerticalTextPosition(JButton.LEFT)

- 44) Which of the following is true? (choose all that apply) 44) _____
- A) All the methods in the JButton class are inherited from the javax.swing.JButton class.
 - B) You can create a JButton by specifying an icon.
 - C) You can create a JButton by a text.
 - D) You can create a JButton using its default constructor.
 - E) You can create a JButton by specifying an icon and text.
- 45) _____ returns the selected item on a JComboBox jcbo. 45) _____
- A) jcbo.getSelectedIndex()
 - B) jcbo.getSelectedIndices()
 - C) jcbo.getSelectedItems()
 - D) jcbo.getSelectedItem()
- 46) Any number divided by 0 would generate an exception. 46) _____
- A) true
 - B) false
- 47) Which of the classes are in the java.lang package? (choose all that apply) 47) _____
- A) IOException
 - B) Exception
 - C) Throwable
 - D) RuntimeException
- 48) An instance of _____ are unchecked exceptions. (choose all that apply) 48) _____
- A) NumberFormatException
 - B) Error
 - C) RuntimeException
 - D) Throwable
 - E) Exception
- 49) Analyze the following program. 49) _____
- ```

class Test {
 public static void main(String[] args) {
 try {
 String s = "5.6";
 Integer.parseInt(s); // Cause a NumberFormatException

 int i = 0;
 int y = 2 / i;
 System.out.println("Welcome to Java");
 }
 catch (Exception ex) {
 System.out.println(ex);
 }
 }
}

```
- A) An exception is raised due to Integer.parseInt(s);
  - B) The program has a compilation error.
  - C) The program compiles and runs without exceptions.
  - D) An exception is raised due to 2 / i;

50) Which of the following statement is correct to rethrow exception ex along with new information? 50) \_\_\_\_\_

- A) throw ex; throw new Exception("Some new info");
- B) throw new Exception("New info", ex);
- C) throw new Exception("New info"); throw ex;
- D) throw new Exception(ex, "New info");

51) An instance of \_\_\_\_\_ describes system errors. If this type of error occurs, there is little you can do beyond notifying the user and trying to terminate the program gracefully. 51) \_\_\_\_\_

- A) Error
- B) NumberFormatException
- C) Throwable.
- D) RuntimeException
- E) Exception

52) Any number divided by 0 would cause a compilation error. 52) \_\_\_\_\_

A) true B) false

53) Analyze the following code. 53) \_\_\_\_\_

```
import java.util.*;

public class Test {
 public static void main(String[] args) throws Exception {
 TreeSet set = new TreeSet();

 set.add("Red");
 set.add("Yellow");
 set.add("Green");
 set.add("Blue");
 SortedSet temp = set.tailSet("Purple");

 System.out.println(temp.first());
 }
}
```

- A) The program displays Green
- B) The program displays Red
- C) The program displays Purple
- D) The program displays Blue
- E) The program displays Yellow

54) When you create an ArrayList using ArrayList<String> x = new ArrayList<String>(2), \_\_\_\_\_ (choose all that apply) 54) \_\_\_\_\_

- A) two elements are created in the array list
- B) the array list size is currently 2
- C) the array list capacity is currently 2
- D) no elements are currently in the array list



55) Analyze the following code:

55) \_\_\_\_\_

```
import java.util.*;

public class Test {
 public static void main(String[] args) {
 PriorityQueue<Integer> queue =
 new PriorityQueue<Integer>(
 Arrays.asList(60, 10, 50, 30, 40, 20));

 while (!queue.isEmpty())
 System.out.print(queue.poll() + " ");
 }
}
```

- A) The program displays 60 10 50 30 40 20
- B) The program displays 10 20 30 40 50 60
- C) There is no guarantee that the program displays 10 20 30 40 50 60
- D) The program displays 60 50 40 30 20 10

56) Which of the following are true? (choose all that apply)

56) \_\_\_\_\_

- A) You can insert an element anywhere in an arraylist.
- B) You should use an array list if your application does not require adding and remove an element anywhere in a list.
- C) You can use a linked list to improve efficiency for adding and remove an element anywhere in a list.
- D) You can insert an element anywhere in a linked list.

57) Which of the following statements are true? (choose all that apply)

57) \_\_\_\_\_

- A) The AbstractList class provides a partial implementation for the List interface.
- B) java.util.List inherits all the methods from java.util.Collection. Additionally, it contains new methods for manipulating a list.
- C) LinkedList is a concrete implementation of List using a linked list. LinkedList contains all the methods in List and additional new methods for manipulating a linked list.
- D) ArrayList is a concrete implementation of List using an array.
- E) ListIterator is a subinterface of Iterator and it provides the methods to support bi-directional traversal of a list.

58) Which of the following methods are in the Collection interface? (choose all that apply)

58) \_\_\_\_\_

- A) getSize()
- B) size()
- C) clear()
- D) isEmpty()

59) If a prepared statement preparedStatement is a SQL SELECT statement, you execute the statement using \_\_\_\_\_.

59) \_\_\_\_\_

- A) preparedStatement.executeQuery();
- B) preparedStatement.executeUpdate();
- C) preparedStatement.execute();
- D) preparedStatement.query();

60) In a relational data model, \_\_\_\_\_ provides the means for accessing and manipulating data. (choose all that apply)

60) \_\_\_\_\_

- A) Structure
- B) Language
- C) Integrity
- D) SQL

- 61) Suppose a prepared statement is created as follows: 61) \_\_\_\_\_
- ```
Statement preparedStatement = connection.prepareStatement
("insert into Student (firstName, mi, lastName) " +
"values (?, ?, ?)");
```
- To set a value John to the first parameter, use
- A) preparedStatement.setString(1, "John"); B) preparedStatement.setString(0, "John");
C) preparedStatement.setString(1, 'John'); D) preparedStatement.setString(0, 'John');
- 62) Which of the following statements are true? (choose all that apply) 62) _____
- A) CallableStatement is for executing predefined functions and procedures.
B) CallableStatement is more efficient than PreparedStatement.
C) CallableStatement is for SQL query statements only. You cannot create a CallableStatement for SQL update statements.
D) CallableStatement is a subinterface of PreparedStatement.
- 63) Where is com.mysql.jdbc.Driver located? 63) _____
- A) in a JAR file classes12.jar downloadable from the book's Companion Website
B) in a JAR file ojdbc14.jar downloadable from the book's Companion Website
C) in a JAR file mysqljdbc.jar downloadable from the book's Companion Website
D) in the standard Java library bundled with JDK
- 64) Database meta data are retrieved through _____. 64) _____
- A) a Connection object B) a ResultSet Object
C) a Statement object D) a PreparedStatement object
- 65) You can use methods _____ on any instance of java.awt.Component. (choose all that apply) 65) _____
- A) setBackground
B) setBorder
C) getBackground
D) getHeight
E) getWidth
- 66) Suppose a JFrame uses the GridLayout(2, 2). If you add six buttons to the frame, how many columns are displayed? 66) _____
- A) 1 B) 3 C) 2 D) 4
- 67) Can you use the setToolTip method to set a tool tip for _____? (choose all that apply) 67) _____
- A) JLabel
B) JComponent
C) Component
D) Container
E) JButton
- 68) What is best to describe the relationship between a container and a layout manager? 68) _____
- A) Aggregation B) Association C) Composition D) Inheritance

- 69) A button's background color can be changed, as well as its foreground color. 69) _____
A) true B) false
- 70) Given a Graphics object g, to draw an outline of a rectangle of width 20 and height 50 with the upper-left corner at (20, 20), you use _____. 70) _____
A) g.drawRectFill(20, 20, 20, 50) B) g.drawRectFill(20, 50, 20, 20)
C) g.drawRect(20, 20, 20, 50) D) g.drawRect(20, 50, 20, 20)
- 71) Given a Graphics object g, to draw a filled oval with width 20 and height 30 centered at (50, 50), you use _____. 71) _____
A) g.fillOval(40, 35, 20, 30)
B) g.fillOval(30, 30, 20, 30)
C) g.fillOval(50, 50, 20, 30)
D) g.fillOval(30, 30, 40, 30)
E) g.fillOval(50, 50, 40, 30)
- 72) You should override the _____ method to draw things on a Swing component. 72) _____
A) init() B) paintComponent()
C) repaint() D) update()
- 73) You should never directly call the repaint() method. 73) _____
A) true B) false
- 74) Which of the following statements are true? (choose all that apply) 74) _____
A) The listener object's class must implement the corresponding event-listener interface.
B) A source may have multiple listeners.
C) Each event class has a corresponding listener interface.
D) The listener object must be registered by the source object.
E) A listener may listen for multiple sources.
- 75) To be a listener for ActionEvent, an object must be an instance of _____. 75) _____
A) ActionListener
B) EventObject
C) ActionEvent
D) WindowListener
E) WindowEvent
- 76) To enable a component to listen to keyboard events, you need to _____. 76) _____
A) Implement the KeyListener interface for the component
B) Invoke the component's requestFocus method to set focus on this component
C) Override the isFocusTraversable method defined in the Component class to return true
D) All of the above.
- 77) Which of the following statements are true? (choose all that apply) 77) _____
A) All the methods in JCheckBox are also in JButton.
B) You can use an icon on JCheckBox.
C) All the methods in JCheckBox are inherited from javax.swing.AbstractButton.
D) JButton and JCheckBox fire same types of events.

78) Which of the following statements are true? (choose all that apply) 78) _____
A) You can specify the number of columns in a text area.
B) You can specify a horizontal text alignment in a text area.
C) You can disable editing on a text area.
D) You can create a text field with a specified text area.

79) You can change the caption of a label. 79) _____
A) true B) false

80) What is displayed on the console when running the following program? 80) _____

```
class Test {  
    public static void main (String[] args) {  
        try {  
            System.out.println("Welcome to Java");  
            return;  
        }  
        finally {  
            System.out.println("The finally clause is executed");  
        }  
    }  
}
```

- A) The finally clause is executed
- B) Welcome to Java followed by The finally clause is executed in the next line
- C) Welcome to Java
- D) None of the above

81) What is displayed on the console when running the following program?

81) _____

```
class Test {  
    public static void main(String[] args) {  
        try {  
            System.out.println("Welcome to Java");  
            int i = 0;  
            int y = 2/i;  
            System.out.println("Welcome to Java");  
        }  
        finally {  
            System.out.println("End of the block");  
        }  
  
        System.out.println("End of the block");  
    }  
}
```

- A) The program displays Welcome to Java two times followed by End of the block.
- B) The program displays Welcome to Java and End of the block, and then terminates because of an unhandled exception.
- C) The program displays Welcome to Java three times followed by End of the block.
- D) The program displays Welcome to Java two times followed by End of the block two times.

82) What exception type does the following program throw?

82) _____

```
public class Test {  
    public static void main(String[] args) {  
        Object o = new Object();  
        String d = (String)o;  
    }  
}
```

- A) `ArrayIndexOutOfBoundsException`
- B) `ArithmeticException`
- C) `StringIndexOutOfBoundsException`
- D) No exception
- E) `ClassCastException`

83) Which of the following is correct to perform the set intersection of two sets s1 and s2?

83) _____

- A) `s1.intersect(s2)`
- B) `s1.retainAll(s2)`
- C) `s1.intersection(s2)`
- D) `s1.join(s2)`

84) Which method do you use to remove an element from a set or list named x?

84) _____

- A) `x.delete(element)`
- B) `x.deletes(element)`
- C) `x.remove(element)`
- D) `x.removes(element)`
- E) None of the above

85) A database URL for a MySQL database named test on host panda.armstrong.edu is _____. 85) _____
A) jdbc:mysql:/panda.armstrong.edu/test B) jdbc:mysql://panda.armstrong.edu/test
C) jdbc:mysql://panda.armstrong.edu/test D) jdbc:mysql.//panda.armstrong.edu/test

86) Which of the following statements are true? (choose all that apply) 86) _____
A) You may create multiple statements from one connection.
B) You may create multiple connections to a database.
C) You can send queries and update statements through a Statement object.
D) You may load multiple JDBC drivers in a program.

87) Analyze the following code. 87) _____

```
import java.awt.*;  
import javax.swing.*;
```

```
public class Test {  
    public static void main(String[] args) {  
        Component c = new JButton("OK");  
        JFrame frame = new JFrame("My Frame");  
        frame.add(c);  
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        frame.setVisible(true);  
    }  
}
```

- A) You cannot create a JFrame using new JFrame("My Frame").
- B) You cannot assign a JButton to a variable of java.awt.Component.
- C) You cannot add a Swing component directly to a JFrame using add(c) prior to JDK 1.4, but it is OK in JDK 1.5.
- D) You can only add c to a container because c's type is Component.

88) Which of the following statements are true? (choose all that apply) 88) _____
A) A user interface object such as (button, list) can appear in one container.
B) Every instance of Component can be added to a container.
C) All Swing GUI components are lightweight.
D) To distinguish new Swing component classes from their AWT counterparts, Swing GUI component classes are named with a prefix J.
E) A container such as JFrame is also a component.

89) Analyze the following code.

89) _____

```
import java.awt.*;
import javax.swing.*;

public class Test extends JFrame {
    public Test() {
        add(new MyDrawing("Welcome to Java!"));
    }

    public static void main(String[] args) {
        JFrame frame = new JFrame();
        frame.setSize(300, 300);
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setVisible(true);
    }
}

class MyDrawing extends JPanel {
    String message;

    public MyDrawing(String message) {
        this.message = message;
    }

    public void paintComponent(Graphics g) {
        super.paintComponent(g);

        g.drawString(message, 20, 20);
    }
}
```

- A) The program would display Welcome to Java! if new JFrame() is replaced by new Test("My Frame").
- B) The program runs fine and displays Welcome to Java!
- C) The program would display Welcome to Java! if new JFrame() is replaced by new Test().
- D) The program would display Welcome to Java! if new JFrame() is replaced by Test().

90) Which of the following statements are true? (choose all that apply)

90) _____

- A) The keyReleased handler is invoked when a key is released.
- B) The keyTyped handler is invoked when a Unicode character is entered.
- C) The keyPressed handler is invoked when a key is pressed.
- D) The keyTyped handler is invoked when a key is entered.

91) Which of the following statements are true? (choose all that apply)

91) _____

- A) You can create a label with both text and icon.
- B) All the methods in JLabel are inherited from javax.swing.AbstractButton.
- C) You can create a label with an icon.
- D) You can set a mnemonic key in a JLabel.

92) What is wrong in the following program?

92) _____

```
class Test {  
    public static void main (String[] args) {  
        try {  
            System.out.println("Welcome to Java");  
        }  
    }  
}
```

- A) You cannot have a try block without a catch block.
- B) A method call that does not declare exceptions cannot be placed inside a try block.
- C) Nothing is wrong.
- D) You cannot have a try block without a catch block or a finally block.

93) Which of the following statements are true? (choose all that apply)

93) _____

- A) All interfaces and classes in the Collections framework are declared using generic type in JDK 1.5.
- B) The Collection interface provides the basic operations for adding and removing elements in a collection.
- C) Some of the methods in the Collection interface cannot be implemented in the concrete subclass. In this case, the method would throw `java.lang.UnsupportedOperationException`, a subclass of `RuntimeException`.
- D) The `AbstractCollection` class is a convenience class that provides partial implementation for the Collection interface.
- E) The Collection interface is the root interface for manipulating a collection of objects.

94) In a relational data model, _____ defines the representation of the data.

94) _____

- A) Structure
- B) SQL
- C) Language
- D) Integrity

95) A panel can be placed inside a frame.

95) _____

- A) true
- B) false

96) Which of the following methods draws a filled 3D rectangle. (choose all that apply)

96) _____

- A) `g.fill3DRect(50, 50, 20, 30, true)`
- B) `g.fill3DRect(50, 50, 20, 30, 1)`
- C) `g.fill3DRect(50, 50, 20, 30, false)`
- D) `g.fill3DRect(50, 50, 20, 30)`

97) The listener for an action event is an instance of _____.

97) _____

- A) `ItemListener`
- B) `KeyListener`
- C) `MouseListener`
- D) `ComponentListener`
- E) `ActionListener`

98) How many items can be selected from a `JComboBox` object at a time?

98) _____

- A) 2
- B) 0
- C) 1
- D) Unlimited

99) What exception type does the following program throw?

99) _____

```
public class Test {  
    public static void main(String[] args) {  
        System.out.println(1 / 0);  
    }  
}
```

- A) `ArrayIndexOutOfBoundsException`
- B) `StringIndexOutOfBoundsException`
- C) `ArithmeticException`
- D) `ClassCastException`
- E) No exception

100) Which of the following statements are true? (choose all that apply)

100) _____

- A) You can reduce the capacity of a `LinkedList` by invoking the `trimToSize()` method on the list.
- B) An `ArrayList` can shrink automatically.
- C) An `ArrayList` can grow automatically.
- D) You can reduce the capacity of an `ArrayList` by invoking the `trimToSize()` method on the list.

Answer Key

Testname: QUIZ2_REAL

- 1) B, C, E
- 2) B
- 3) A, B, C, D
- 4) A
- 5) D
- 6) C
- 7) C
- 8) B
- 9) A, D
- 10) B
- 11) D
- 12) A
- 13) A, D
- 14) A
- 15) A
- 16) B
- 17) D
- 18) A
- 19) A
- 20) B
- 21) A
- 22) A
- 23) A
- 24) E
- 25) A, B, C
- 26) C
- 27) D
- 28) A, B, C, D
- 29) D, E
- 30) A, B, C, D
- 31) A
- 32) B
- 33) A, C
- 34) D
- 35) A, B, C, E
- 36) A, B, C, D, E
- 37) A
- 38) A
- 39) B, C, D
- 40) A
- 41) A, B, C, D
- 42) B, C
- 43) A
- 44) A, B, C, D, E
- 45) D
- 46) B
- 47) B, C, D
- 48) A, B, C

Answer Key

Testname: QUIZ2_REAL

- 49) A
- 50) B
- 51) A
- 52) B
- 53) B
- 54) C, D
- 55) B
- 56) A, B, C, D
- 57) A, B, C, D, E
- 58) B, C, D
- 59) A
- 60) B, D
- 61) A
- 62) A, D
- 63) C
- 64) A
- 65) A, C, D, E
- 66) B
- 67) A, B, E
- 68) A
- 69) A
- 70) C
- 71) A
- 72) B
- 73) B
- 74) A, B, C, D, E
- 75) A
- 76) D
- 77) A, B, C
- 78) A, C, D
- 79) A
- 80) B
- 81) B
- 82) E
- 83) B
- 84) C
- 85) B
- 86) A, B, C, D
- 87) C
- 88) A, D, E
- 89) C
- 90) A, B, C
- 91) A, C
- 92) D
- 93) A, B, C, D, E
- 94) A
- 95) A
- 96) A, C

Answer Key

Testname: QUIZ2_REAL

97) E

98) C

99) C

100) C, D